

ChemDesign Products, Inc.
2 Stanton Street, Marinette, WI
Air Permit Renewal EAO:

Q1) What is the purpose of this air permit? Why is it being renewed?

A1) Owners or operators of industrial sources that emit pollutants to the atmosphere over certain thresholds need to apply for and work with the Wisconsin Department of Natural Resources (DNR) air program to obtain an air permit. A permit protects public health and the environment by establishing limits on production or emissions, requiring controls and operating parameters and setting other requirements to assure that owners or operators comply with all applicable state and federal air regulations.

Many Wisconsin companies are required to have air pollution control operation permits. An operation permit is issued to cover existing operations at an entire facility and assures compliance with federal air regulations.

There are two types of operation permits:

- Part 70 Permits: Part 70 permits, also referred to as Title V permits because the program was established under Title V of the Clean Air Act, and non-Part 70 permits. All Part 70 permits must include an expiration date and must be renewed every 5 years.
- Non-Part 70 Permits: Effective Dec. 2015, non-Part 70 operation permits issued after this date are not required to include an expiring term and therefore do not include an expiration date unless otherwise determined by the department. So long as an operation permit has an expiration date on its cover page, it will need to be renewed. Upon renewal, any non-Part 70 permit will no longer expire and all conditions in the permit will remain in effect unless revised or revoked. For a permit that requires renewal, the permittee must apply for the renewal at least six months before the permit's expiration but no more than 18 months before expiration.

ChemDesign will be renewing its non-part 70 air permit.

Q2) Are there any changes included in the renewal for the ChemDesign Operation Permit?

A2) ChemDesign Products, Inc., located at 2 Stanton Street, Marinette, Wisconsin (ChemDesign), holds a Non-Part 70 operation permit last issued on Jan. 5, 2015. Because it was issued before Dec. 2015 and contains an expiration date, the Wisconsin DNR is required to renew the operation permit. The renewal currently under review will continue to be a non-Part 70 operation permit and will not contain an expiration date.

Even though the permit will not have an expiration date, any future changes to equipment or operations must be reviewed to determine if a permit to construct or modify is needed before making any change. These changes, once authorized, will also need to be included in the facility's operation permit through a revision.

Similarly, if regulations that apply to the facility change or if there are new regulations, the operation permit must be reopened and revised to include any new or changed requirements.

The operation permit will also contain the requirements of a federal Consent Agreement and Final Order issued by the U.S. Environmental Protection Agency (U.S. EPA) on Sept. 8, 2020 for compliance demonstration with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Chemical Manufacturing Area Sources. The operation permit will also have additional operating parameters and control efficiency requirements for the air pollution control equipment used to control emissions from facility processes.

Q3) What is the process for reviewing and issuing an operation permit renewal?

A3) Before an air pollution control permit is issued, the DNR analyzes the impact of the facility emissions on ambient air quality and makes a preliminary determination that, if operated according to the requirements in the draft permit, the facility will be able to meet all the criteria listed in s. 285.63, Wis. Stats. This includes meeting all applicable state and federal requirements and protecting air quality. The DNR's analysis and preliminary determination communicate the legal and factual basis for the draft permit conditions. The analysis is based on information

contained in the permit application(s) and any additional information obtained by the DNR as part of the application review. The analysis identifies the DNR's authority for each permit requirement. All conditions for approval are contained in the draft permit prepared by the department.

The draft permit, the application and the DNR's Analysis and Preliminary Determination document are all made available to the public. A legal notice is published in the Wisconsin State Journal and the public notice is placed on the DNR's website with links to all the permit documents. The public and the facility have 30 days after the notice is placed on the website to review and provide comments on the DNR's technical review and draft permit conditions. During this time, a public hearing may be held if one is requested. All written comments received are posted to the DNR's website.

After the public comment period is over, the DNR reviews and considers all comments. Comments that are only "for" or "against" the permit issuance do not enter into the DNR's decisions. The DNR approves a final permit if the technical analysis shows that the facility can comply with the health and environmental standards specified in state and federal air pollution laws and statutes.

Public input can affect final permit content or the final decision when it can point out technical errors or places where the analysis did not adequately address or apply a rule or regulation. Some questions for citizens to consider when reviewing draft permit documents include:

- Were the technical details in the application, the DNR's analysis of the application and the draft permit all complete and accurate?
- Were all sources of regulated air emissions covered in the permit application?
- Were all state and federal air pollution requirements correctly included, such as emissions limitations, work practice standards, compliance demonstration methods and record-keeping?
- Are requirements for checking regulated air pollution emissions and emission control device operations sufficient?

After the public comment period is over, the DNR summarizes all comments and creates a response document. The conditions in the draft permit may be changed based on comments received or further evaluation by the department. If approvable, the final permit will be issued and the response to the comment document finalized. All final permit documents are posted on the DNR's website and available to the public through the [permit search tool](#).

For more information on air permits and the permit process, [visit the DNR's Air Permit webpage](#).

Q4) Will the public have an opportunity to review this permit and make comments?

A4) Yes, the public will have an opportunity to review the draft permit and make comments. The permit will have a 30-day public comment period and a hearing can be requested by the public by contacting the DNR permit reviewer listed in [the public notice](#) and stating why they feel a hearing is warranted and if they are representing an organization. The public hearing request must be submitted in written form within 30 days of publication of the public notice. The Air Management program is holding hearings virtually. A final decision will not be made on the permit until the applicable notification, public comment and hearing requirements in [ss. 285.61](#) and/or [285.62, Wis. Stats.](#) and/or [ss. NR 406.11](#) and/or [NR 407.11 through NR 407.14](#), Wis. Adm. Code have been met.

Q5) Drinking and groundwater sampling efforts have detected PFAS proximal to this facility. PFAS emissions have been discovered at facilities with similarities to ChemDesign. What is PFAS?

A5) PFAS are a group of human-made chemicals used for decades in numerous products, including non-stick cookware, fast food wrappers, stain-resistant sprays and certain types of firefighting foam. These legacy contaminants have made their way into the environment in a variety of ways, including spills of PFAS-containing materials, discharges of PFAS-containing wastewater to treatment plants, and use of certain types of firefighting foams. For more information on PFAS, [please visit the DNR's PFAS webpage](#).

Q6) Does ChemDesign emit PFAS compounds to the ambient air (atmosphere)? How much PFAS does it emit into the air?

A6) PFAS compounds can be emitted into the atmosphere from the handling and use of materials that contain PFAS compounds. There are currently no approved U.S. EPA methods for determining emission rates of PFAS compounds. The U.S. EPA is in the process of developing test methods. Only one PFAS compound is listed as a regulated air contaminant in the state air toxics rule. Because of this, Safety Data Sheets are not required to list any other PFAS compounds and the facilities are not required to include them as substances in their air permit applications. At this time, the DNR is uncertain whether other, unregulated PFAS compounds are emitted into the air from this facility.

Q7) Does ChemDesign utilize control equipment to minimize PFAS emissions? What type of controls does it utilize? How effective are the controls?

A7) ChemDesign utilizes processes and control equipment to minimize emissions of regulated pollutants from operations. Types of processes and control equipment utilized at the facility include condensers and scrubbers. There are currently no approved U.S. EPA methods for determining PFAS emission rates. Therefore, control efficiencies for PFAS cannot be determined, since control efficiency is typically determined by comparing inlet concentration to outlet concentration.

Q8) How much PFAS is safe to breathe? What is the health standard for breathing PFAS?

A8) There are no national standards or guidelines for acceptable PFAS ambient air concentrations. Except for ammonium perfluorooctanoate, there are no Wisconsin standards or guidelines for acceptable PFAS concentrations in ambient air. The Wisconsin ambient air standard (NR 445) for ammonium perfluorooctanoate is 0.24 micrograms/cubic meter, which was established to prevent respiratory irritation. The DNR is working with the Department of Health Services (DHS) to review other states' and federal agencies' guidelines for PFAS in air, soil, water, fish and wildlife.

Q9) Why doesn't the permit contain emission limits for PFAS compounds?

A9) There are currently no federal air emission limitations the DNR may include in a permit at this facility. One of these compounds, ammonium perfluorooctanoate, is listed as a hazardous air pollutant in Chapter NR 445 of the Wisconsin Administrative code. Operation permits are issued with all state and federal air pollution requirements and at this time, there are no state and federal air pollution requirements covering PFAS compounds. ChemDesign has indicated that the one regulated PFAS, ammonium perfluorooctanoate, is not contained within purchased materials, created or emitted from the facility.

Q10) Why doesn't the permit require testing to determine PFAS emission rates? Is ChemDesign or the Wisconsin DNR testing to determine PFAS emission rates? Why or why not?

A10) There are currently no approved U.S. EPA methods for determining emission rates of PFAS compounds. The U.S. EPA is in the process of developing test methods. The Wisconsin DNR is working with the EPA and other states to gather knowledge of methods and, once testing methods are federally approved and enforceable, will use its authority to require testing where and when it is appropriate.

Q11) Since the permit does not have an expiration date, is the DNR required to reopen the permit if/when PFAS measurement techniques, air standards and control technologies are put into place?

A11) State and federal regulations require an operation permit to be reopened and revised if there is a change in any applicable requirement, a new applicable requirement or an additional requirement found to apply. These "mandatory revision" requirements apply if there are more than 3 years remaining in the term of the permit. Since this operation permit does not have an expiring term, there would always be more than 3 years remaining on the term of the permit and the mandatory revision requirements would kick in.

Q12) Why doesn't the permit require ambient monitoring in the area to determine ambient air concentrations of PFAS? Is ChemDesign or the Wisconsin DNR monitoring to determine ambient air concentrations of PFAS in the area surrounding the plant? Why or why not?

A12) The DNR is committed to understanding the air transport pathway for PFAS and is working with the Wisconsin State Laboratory of Hygiene (WSLH) and the U.S. EPA on method development studies. There are currently no approved U.S. EPA methods for directly monitoring PFAS compound concentrations in ambient air. In 2020, the DNR air program collaborated on an intensive PFAS air deposition method development project in the Marinette area with the goal of developing and testing the processes involved and validity of sampling PFAS in the air via rainwater samples.

The final results from that study are unavailable at this time. Unfortunately, there was contamination in the lab analysis instrumentation. Resultant data did not meet all quality assurance requirements. To ensure data from this important study are of the highest quality, all samples collected from the entirety of the study are undergoing re-analysis at an alternate lab.

Generally, preliminary data indicates no combined PFAS levels above the EPA's Health Advisory Level (HAL) or the DNR's recommended groundwater standards of 20 parts per trillion (ppt) for PFOA and PFOS individually and combined. The method development was a collaborative study with research partners. Once all parties are confident in the results, the data will be released publicly.

Q13) What is the Wisconsin DNR doing to protect human health and the environment related to PFAS ambient air emissions?

A13) The Wisconsin DNR air program is working with other DNR programs, other Wisconsin agencies, other States and the U.S. EPA to gather the information necessary to monitor, test for and regulate PFAS compounds. As mentioned above, the Wisconsin DNR air program has been conducting air monitoring method development studies to contribute to the broader understanding of ambient air monitoring and the fate and transport of PFAS.